

Dan Lu



Research Scientist

Computational Earth Science Group

Climate Change Science Institute

Oak Ridge National Laboratory

Dan Lu is a research scientist in the Computational Earth Science Group in the Computer Science and Mathematics Division and the Climate Change Science Institute at ORNL. She is currently working on the verification and validation task in the SciDAC project, “Predicting Ice Sheet and Climate Evolution at Extreme Scales (PISCEES)”, and parameter optimization and uncertainty quantification research in the BER project, “Terrestrial Ecosystem Science-Science Focus Area”. She developed efficient model calibration and uncertainty quantification methods for the Community Land Model, which improves model parameterization and predictive skill. Dan is collaborating with experts in climate modeling and computational sciences to develop an efficient model-data fusion framework for the Community Earth System Model that takes great advantage of ORNL’s high-performance computing resources.

Dan received her B.S. in environmental engineering and M.S. in water resource and hydrology in China. She earned her Ph.D. in computational science from the Florida State University in 2012. Dan has broad research interests including: uncertainty quantification and risk assessment in environmental sciences, numerical simulation of groundwater flow and solute transport, development of computational methods and algorithms for inverse modeling, and design of experiments for cost-effective data collection.

Email: lud1@ornl.gov
Phone: 850-591-3598

One Bethel Valley Road
P.O. Box 2008, MS-6301
Oak Ridge, TN 37831-6301